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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,928	07/08/2003	Jin-Yuan Lee	MEG00-009B	9220

7590 09/11/2006  
George O. Saile  
28 Davis Avenue  
Poughkeepsie, NY 12603

EXAMINER

MENZ, DOUGLAS M

ART UNIT	PAPER NUMBER
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2891

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/614,928

Applicant(s)

LEE

Examiner

Douglas M. Menz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25-29, 31-35 and 45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-29, 31-35 and 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Declaration***

The declaration filed on 6/15/06 under 37 CFR 1.131 is sufficient to overcome the Taniguchi reference.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 25-29,31-35 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Tokuda et al. (US 5870289).

Regarding claim 25, Tokuda discloses an electronic package comprising:

- a first circuitry component having a top surface (210-n, Fig. 4);
- a second circuitry component (210-n-1, Fig. 4) over said top surface;
- a first insulating layer (220-n-1, Fig. 4) covering said second circuitry component and said top surface; and a metal layer (wiring layer on top 220) on said insulation layer (Fig. 4 and Cols. 15-16).

Regarding claim 26, Tokuda further discloses wherein said first circuitry component comprises a semiconductor chip (210, Fig. 4).

Regarding claim 27, Tokuda further discloses wherein said second circuitry component comprises a semiconductor chip (210-n-1, Fig. 4).

Regarding claim 28, Tokuda further discloses a bump between said first and second circuitry components (Fig. 4 and Cols. 15-16).

Regarding claim 29, Tokuda further discloses a second insulating layer (230, Fig. 4) between said first and second circuitry components and enclosing said bump (Fig. 4 and Cols. 15-16).

Regarding claim 31, Tokuda further discloses a via (270, Fig. 4) through said first insulation layer and connecting said first circuitry component and said metal layer (Fig. 4 and Cols. 15-16).

Regarding claim 32, Tokuda further discloses wherein said first insulation layer (220-n-1, Fig. 4) has a top surface comprising a first region and a second region, said first region being over said second circuitry component, said second region being not

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over said second circuitry component, wherein said first and second regions are coplanar (Fig. 4 and Cols. 15-16).

Regarding claim 33, Tokuda further discloses wherein said metal layer is on said first and second regions (Fig. 4 and Cols. 15-16).

Regarding claim 34, Tokuda further discloses a bump over said metal layer (Fig. 4 and Cols. 15-16).

Regarding claim 35, Tokuda further discloses wherein said second circuitry component comprising a top surface and a bottom surface facing said top surface of said first circuitry component, said first insulation layer over said top surface of said second circuitry component (Fig. 4 and Cols. 15-16).

Regarding claim 45, Tokuda further discloses a substrate (280, Fig. 4) and a second bump (290) connected to a bottom surface of the substrate, wherein the first bump is connected to a top surface of the substrate (Fig. 4 and Cols. 15-16).

### ***Response to Arguments***

Applicant's arguments with respect to claims 25-35 have been considered but are moot in view of the new ground(s) of rejection.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas M. Menz whose telephone number is 571-272-1877. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumeister can be reached on 571-272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DM

 9/4/06